

REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Official Action dated 27 January 2005. Responsive to the rejections made in the Official Action, Claim 2 has been amended to clarify the combination of elements which form the invention of the subject Patent Application. Additionally, Claims 6 and 7 have been amended to correct the language thereof and Claims 1, 3 and 4 have been cancelled by Amendment.

In the Official Action, the Examiner acknowledged election of Claims 2 – 7 for further prosecution. Accordingly, the non-elected claim, Claim 1, has been cancelled by this Amendment.

In the Official Action, the Examiner rejected Claims 2 – 7 under 35 U.S.C. § 102(b), as being anticipated by Bellin et al., U.S. Patent No. 5,550,460.

Before discussing the prior art relied upon by the Examiner, it is believed beneficial to first briefly review the structure of the invention of the subject Patent Application, as now claimed. The invention of the subject Patent Application is directed to a multi-purpose transforming device which includes a power supply device having a power import device for accepting external AC power and a power output device for supplying DC power to an electric device load. The power supply device includes an AC power supply unit coupled to the power import device for transforming alternating current from an external source into direct current and outputting the direct current. The power supply device includes

a power-regulating unit having a first input coupled to an output of the AC supply unit for accepting the direct current and supplying a regulated voltage to the electric device load. The voltage-regulating unit has an output coupled to the power output device. The power supply device includes a galvanometry unit coupled to the output of the voltage-regulating unit for sampling a load current from the voltage-regulating unit. The galvanometry unit converts the sampled load current into a current value for coupling to an output thereof. Further, the power supply device includes a microprocessor coupled to a memory and having a first output coupled to a second input of the voltage-regulating unit for controlling the value of the regulated voltage. The microprocessor has an input coupled to the output of the galvanometry unit for receiving current values therefrom at uniform time intervals. The microprocessor controls the voltage-regulating unit to output a test voltage supplied to the electric device load in discrete steps from zero to a final voltage value. Each step is at the uniform time intervals. The final voltage value is established by the microprocessor responsive to a match between the current values and the test voltage with voltage and current load data pre-stored in the memory. The voltage-regulating unit supplies the regulated voltage equal to the final voltage value to the electric device load.

In contradistinction, the Bellin et al. reference is directed to a voltage regulator control system with multiple control programs for controlling a step type AC voltage regulator. Here, a microprocessor is utilized to control a tap changer

of a voltage regulator transformer. The voltage regulator transformer provides a substantially constant AC voltage output, the voltage being adjusted by changing a tap of a multitap winding of the transformer. Thus, contrary to the Examiner's assertion, nowhere does the reference disclose or suggest providing a DC voltage to an electric device load. The output U2, that the Examiner suggests provides a DC voltage is directly connected to a regulator utility winding PT1. No rectification is shown in any of the drawings for that output or described in the specification. Therefore, there is no justification for describing that output as providing a DC voltage.

While the microprocessor control adjusts the tap setting in accordance with operating conditions, such as demand, there is no disclosure of the tap settings being advanced from a condition where the regulator outputs zero volts to a final value, and in fact, the regulating transformer of the type described are typically adjusted within a relatively narrow range so as to provide the desired substantially constant voltage output with varying load conditions. Whereas in the invention of the subject Patent Application, the power supply device automatically adjusts the output voltage to suit the load device connected thereto. The current and voltage characteristics for various devices, such as laptop computer and cell phone are pre-stored in the memory which is coupled to the microprocessor. When the operation is initiated, with a load device connected, the microprocessor controls the voltage-regulating unit to output a test voltage which is incremented from zero volts in

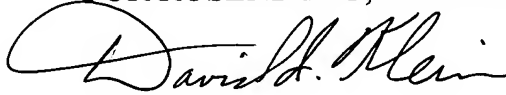
discrete steps at uniform time intervals until the voltage level value and measured current match that which is pre-stored in the memory. Thus, if a laptop computer is the load device, the voltage will be stepped up to the 12 volt range, whereas if a cell phone is the device connected to the power supply device, the voltage will step up to 4.8 volts, for example. Nowhere does the reference disclose or suggest the microprocessor controlling the voltage-regulating unit to output a test voltage supplied to the electric device load in discrete steps from zero to a final voltage value, each step being at the uniform time intervals, the final voltage value being established by the microprocessor responsive to a match between the current values and the test voltage with voltage and current load data pre-stored in the memory.

As the reference fails to disclose each and every one of the elements of the invention of the subject Patent Application, it cannot anticipate that invention. Further, as the reference fails to suggest such a combination of elements, it cannot make obvious that invention either.

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For all the foregoing reasons, it is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

Respectfully submitted,
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